## REMARKS

The issues outstanding in the Office Action mailed December 28, 2006, are solely the various rejections under 35 U.S.C §112. Reconsideration of these issues, in view of the following discussion, is respectfully requested.

**Election/Restriction**

Claims 6, 10 and 11 remain withdrawn, following the restriction requirement. Moreover, in paragraph 6 at page 8 of the Office Action claims which include non-elected subject matter are objected to, and it is requested that the cancellation of the non-elected subject matter be made. Applicants respectfully decline to do so.

First, in accordance with 37 CFR §1.144 and MPEP §818.03(c), Applicants have the right to defer cancellation of non-elected subject matter or petition for an election/restriction requirement until allowance or the filing of an appeal. Secondly, with respect to the presence of non-elected subject matter in the claims, subsequent to the election of species, it is submitted that the MPEP procedures set forth in §803.02 *must* be followed in an election of species situation. Specifically, it is *improper*, where prior art has not been found affecting patentability, to refuse to examine the full scope of the claim provided by Applicants. Accordingly, it is respectfully requested that the proper election of species procedure be followed, the non-elected portions of the present generic claims be examined, or that reasons why the procedure is not being followed be set forth on the record so as to position this application for petition of the restriction.

**Rejections Under 35 U.S.C §112**

Claims 1, 3- 5, 9, 12, 14 and 17 have been rejected under 35 U.S.C §112, second paragraph. Reconsideration of this rejection, in view of the minor typographical changes to the claims, is respectfully requested.

(a) Claim 1 has been amended in order to correct the definitions of $R^1$ and $R^5$, as fully supported in the original claim. Thus, this claim, and claims 9, 12 and 14 which depend on it, fully satisfy the requirements of the statute.

(b) Claim 3 has been amended in order to reinsert the definition of variable n, which was omitted when the claim was placed in independent form. See claim 1. Thus, this claim, and claims 4, 5 and 17 which depend upon it, fully satisfy the requirements of the statute.

Accordingly, withdrawal of the rejections under 35 U.S.C §112, second paragraph is respectfully requested.

Thus, the only issue remaining for discussion is the rejection under 35 U.S.C §112, first paragraph, of claims 13 - 23, as failing to comply with the enablement requirement. The concern expressed in the Office Action apparently continues to be that not all of the compounds of the present claims, which are CDK inhibitors, would be effective to treat solid tumors, tumor or metastasis growth, Kaposi's sarcoma, Hodgkin's Disease or Leukemia, as currently recited in claim 12. Applicants respectfully disagree with this analysis.

At the bottom of page 2 of the Office Action, it is stated that "in evaluating the enablement question, several factors are to be considered." The Office Action then discussed the decision of *In re Wands,* and factors enumerated therein over the next three pages of the Office Action. It is

respectfully submitted that this analysis is misplaced. The focus of the discussion of the "Wands factors" and of the prior iterations of the rejection, which are relied upon in the present rejection, appears to be concern with the scope of the present claims. In particular, prior rejections have argued that the specification does not contain sufficient "evidence" that all indications listed therein can be treated as stated. However, it is submitted that such an analysis, focusing first on breadth of the claims, is completely contrary to applicable case law teaching how enablement analysis is applied. In fact, it is clear that such a recitation of utility in a specification "must" be taken by the PTO as an assertion that *all* compounds encompassed in the claims are operative in the invention, in the absence "reasons or evidence to the contrary." See *In re Marzocchi*, 439 F.2d 220, 169 USPQ 367 (CCPA 1971). Specifically, as stated in *Marzocchi*, the first paragraph of 35 U.S.C §112 requires only *objective* enablement. Where a specification teaches the manner and process of making and using the invention, the specification *must* be taken as sufficient under §112, unless there is reason to doubt the truth of these statements.

Applicants' specification clearly enables one to make and use the disclosed compounds in the claimed methods, as evidenced from the disclosure containing pharmaceutical formulations and dosages and the examples which also detail the production of pharmaceutical formulations. On the one hand, it is submitted that the Examiner has not provided any such reasons or evidence to doubt the assertion of utility in the specification other than the breadth of the claims, e.g, an allegation that not "all" compounds can be expected to be effective against "all" of the cancers in the claim. Thus, the further steps of the analysis as set forth in *Marzocchi,* i.e., the "*Wands factors*" are not reached. The "great diversity of diseases," argued in a prior Office Action, does not rise to the level of such

reasons or evidence. As clearly stated in *Marzocchi*, mere *breadth* of the claims does not, without more, result in non-enablement. As the court stated:

> Turning specifically to the objections noted by the Board as indicated above, it appears that these comments indicate nothing more than a concern over the *breadth* of the disputed term. If we are correct, then the relevance of this concern escapes us. It has never been contended that Applicants, when they included the disputed terms in their specification, intended only to indicate a single compound. Accepting, therefore, that the term is a generic one, its recitation must be taken as an assertion by Applicants that all of the 'considerable number of compounds' which are included in the generic term would, as a class, be operative to produce the asserted enhancement of adhesion characteristics. The only relevant concern of the patent office under these circumstances should be over the *truth* of any such assertion. The first paragraph of §112 requires nothing more than *objective enablement*. How such a teaching is set forth, either by the use of illustrative examples or by broad term analogy, it is of no importance.

*Marzocchi*, *supra*. (Emphasis in original.) Thus, the concern expressed in the Office Action, apparently that the terms used in the claimed methods are broad, does not provide the reasons or evidence necessary by *Marzocchi* to pass beyond the necessity merely for objective enablement.

Further, in this regard, it is important to note, as a matter of law, that it is not necessary for Applicants' *method* claims to exclude inoperative embodiments, inasmuch as the claims are interpreted in light of the level of understanding one of ordinary skill in the art and, for methods, are interpreted to be *per se* functional. See *In re Angstadt*, 190 U.S.P.Q. 214 (CCPA 1976) and *In re Dinh-Nguyen*, 181 U.S.P.Q. 46 (CCPA 1974). These cases state that, for method claims, inoperative embodiments are not encompassed therein and the only question is whether it would be undue

experimentation for one of ordinary skill in the art to determine the scope of the claim. This issue is discussed more fully below. Moreover, anti-tumor utilities are no longer to be considered to be "special", i.e., per se incredulous, by the Patent and Trademark Office. See *Ex parte Rubin*, 5 U.S.P.Q. 2d 1461 (BPAI 1987). As such, applications claiming these methods are, therefore, no more than typical method of use applications wherein the existence of reliable screening protocols correlatable with pharmaceutical activity in humans is sufficient to satisfy §112, in the absence of reasons to the contrary. As noted above, screening protocols for determining the efficacy of the compounds in the anti-tumor utilities are set forth in the specification, and the details of using a given compound can be determined by routine testing using a known protocol which is correlated with human activity, see the proliferation at page 173. The PTO has not alleged it would have been undue experimentation to determine the *scope* of the present method claims. It is important to note that a determination of undue experimentation must be considered on a *compound by compound* basis. The mere fact that a claim is broad does *not* mean that it is undue experimentation is required to determine enablement of the compounds therein, if it is not undue experimentation to determine enablement for *each* compound in the scope of the claim. See, for example, *In re Colianni*, 195 U.S.P.Q. 150 (CCPA 1977). One of ordinary skill in the art can easily determine, with the protocols given in the specification, whether a given compound has the utility stated. Thus, the mere fact that many compounds must be tested is not dispositive of lack of utility.

Thus, objective enablement is clearly present, and withdrawal of the rejection under 35 U.S.C §112 on this basis alone is appropriate.

Moreover, even to the extent that reasons or evidence to doubt the objective truth of

enablement were present, Applicants provide a variety of post published articles verifying the present contention, that CDK inhibition is effective to treat cancers such as those enumerated in the present claims.

For example, note the review article in *Expert Opinion* (2005) **15** (6). *Expert Opinion* states that CDKs are key regulators of cell cycle progression. See, for example, page 684, detailing research on analogous compounds by the present Applicant, and demonstrating their efficacy. Similarly, Senderowicz, *Cancer Chemother Pharmacol* (2003) **52** (Suppl. 1): S61 - S73 discusses the role of CDK inhibitors in the prevention or treatment of Neoplasms and indicates that CDK modulators have shown encouraging results in clinical trials. See page S61. Similar conclusions are evident in *Trends in CELL BIOLOGY* (Volume 6) October 1996, page 393 and Garrett and Fattey, *CDK Inhibition and Cancer Therapy*, Current Opinion in Genetics and Development 1999, 9:104 -111. See also J. Med. Chem. Vol. 43, 1 (January 13, 2000) pages 1 - 18 and Dai and Grant, *Cyclin-Dependant Kinase Inhibitors*, Current Opinion in Pharmacology (2003) 3:362 - 370. All of these references support the conclusion that inhibition of CDK is effective to treat solid tumors etc. as enumerated in claim 12 of the present application. The present application provides screening tests to evaluate CDK inhibition of the claimed compounds. It is thus, clearly, no more than routine experimentation to determine whether a given compound is effective to perform in the methods claimed. Accordingly, even if "reasons or evidence" to doubt utility were present, the analysis of *In re Wands* compels the conclusion that it would be merely routine experimentation to make and use the invention. Accordingly, withdrawal of the rejection is respectfully requested.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

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